

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1 - 12 (CANCELED)

13. (ORIGINAL) An open secondary winding detection apparatus, comprising:

a first comparator having a first and a second input and an output, wherein said first input is operably connected to an ionization signal and said second input is operably connected to a first threshold;

a controller having a first and an enable input and an output, wherein said first input is operably connected to said output of said first comparator;

a timer having a first and an enable input, and an output, wherein said first input is operably connected to said output of said controller; and

a second comparator having a first and a second input and an output, wherein said first input is operably connected to said output of said timer and said second input is operably connected to a second threshold.

14. (ORIGINAL) The open secondary winding detection apparatus according to claim 13 further comprising a powertrain control module having an output operably connected to said enable input of said controller.

15. (CANCELED)

16. (PREVIOUSLY PRESENTED) The open secondary winding detection apparatus according to claim 17 further comprising an open secondary detection enable flag signal operably connected to said enable input of said integrator.

17. (PREVIOUSLY PRESENTED) An open secondary winding detection apparatus, comprising:

an integrator having an ionization signal input, an enable input, a reset input and an output, said reset input being capable of resetting said integrator,

a comparator having a first input operably connected to said output of said integrator, a second input operably connected to a threshold value, and an output, and

a powertrain control module having an input operably connected to said output of said comparator and an output operably connected to said enable input of said integrator, wherein said reset input of said integrator is operably connected to an ignition charge pulse.

18. (CANCELED)

19. (PREVIOUSLY PRESENTED) The open secondary winding detection apparatus according to claim 17 wherein said ionization signal input of said integrator is operably connected to an ionization current measuring circuit.

20. (PREVIOUSLY PRESENTED) The open secondary winding detection apparatus according to claim 17,

wherein an open secondary detection enable flag signal is sent by said powertrain control module to said enable input of said integrator and wherein said ionization current input of said integrator is operably connected to an ionization current measuring circuit.